

FIG. 1(a)

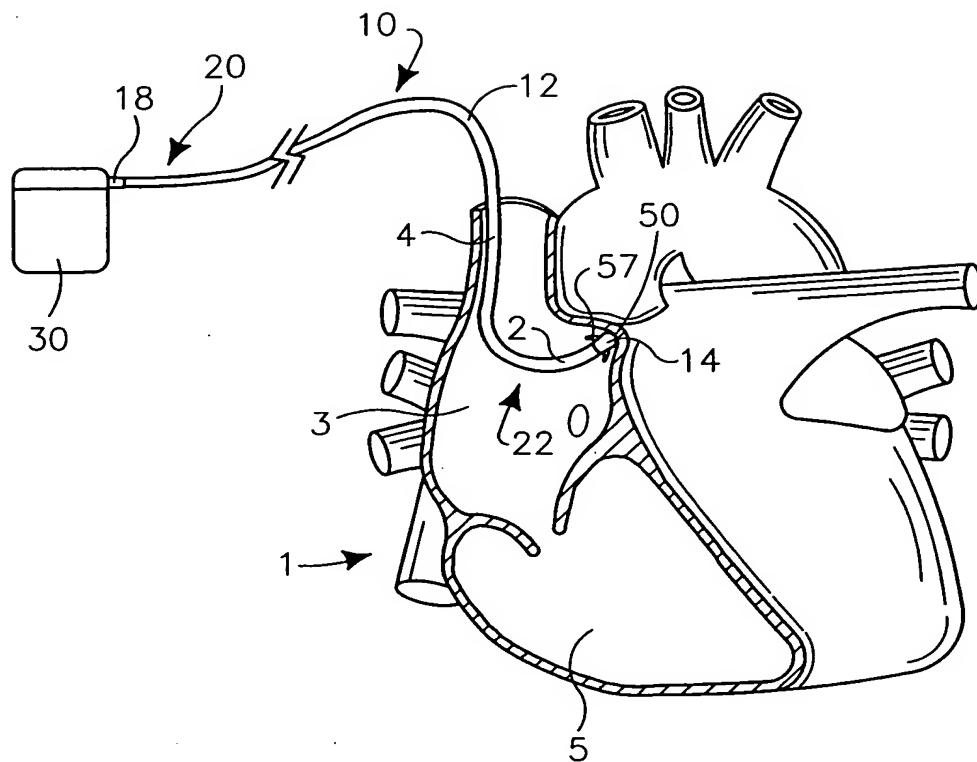
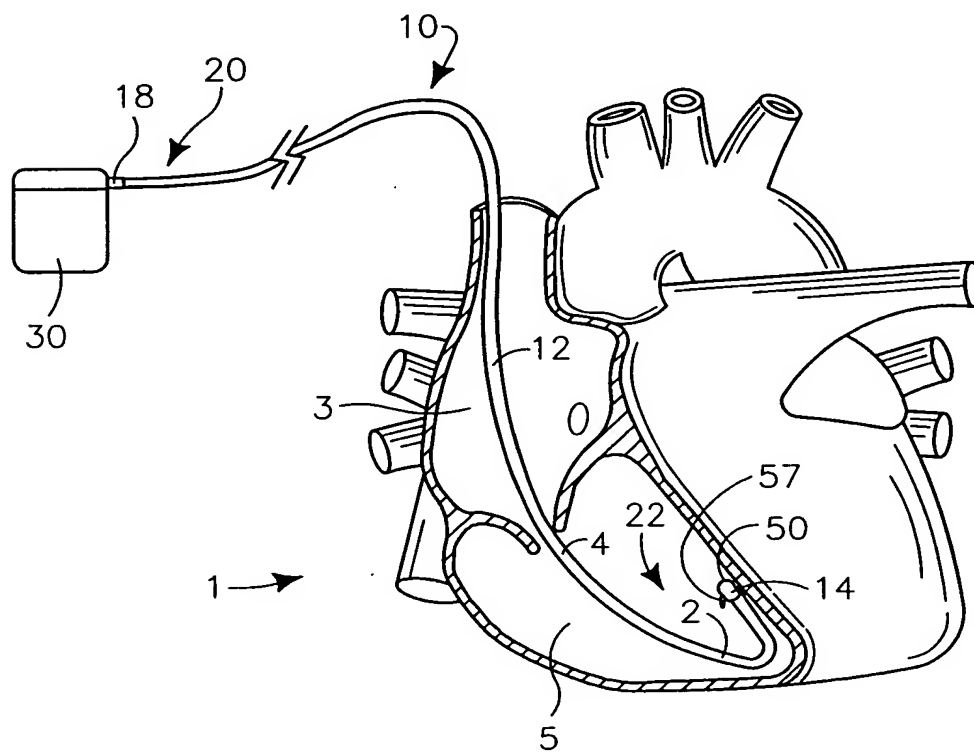


FIG. 1(b)



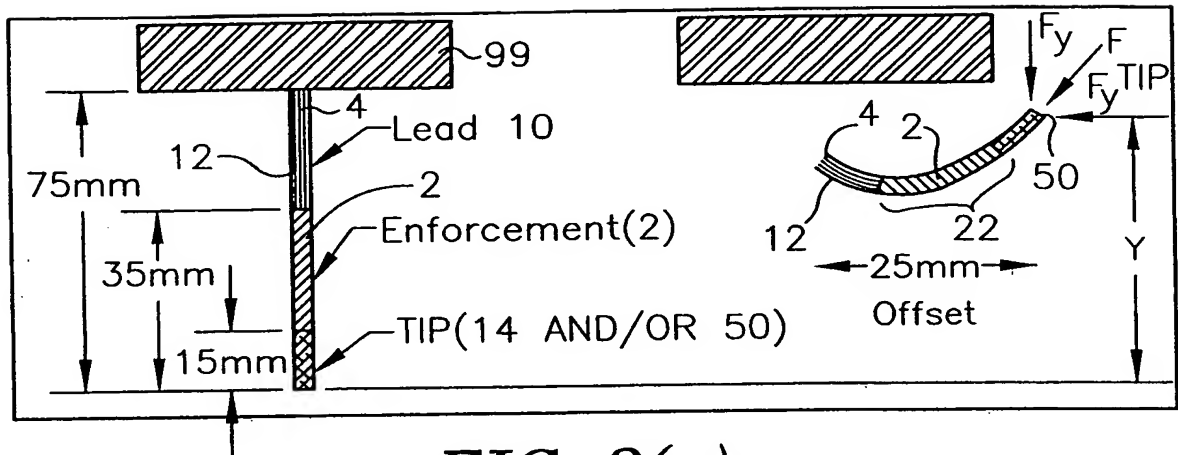


FIG. 2(a)

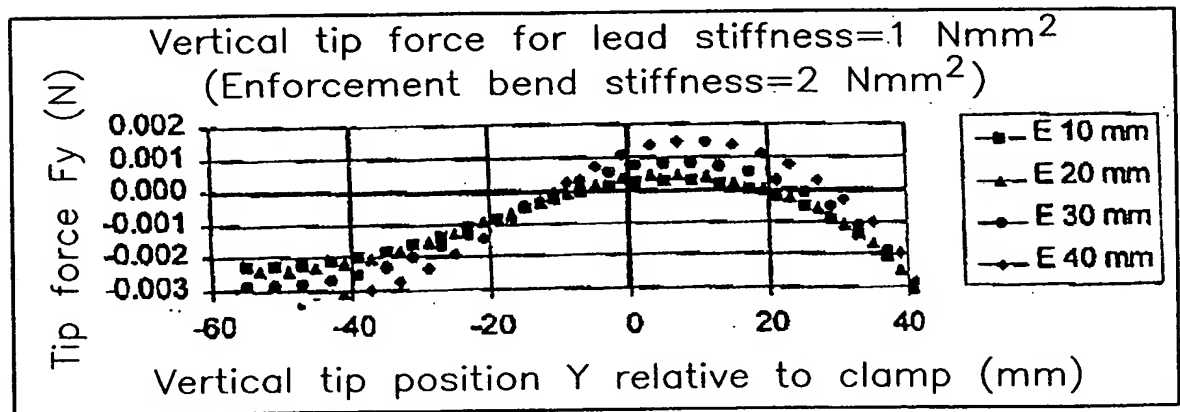
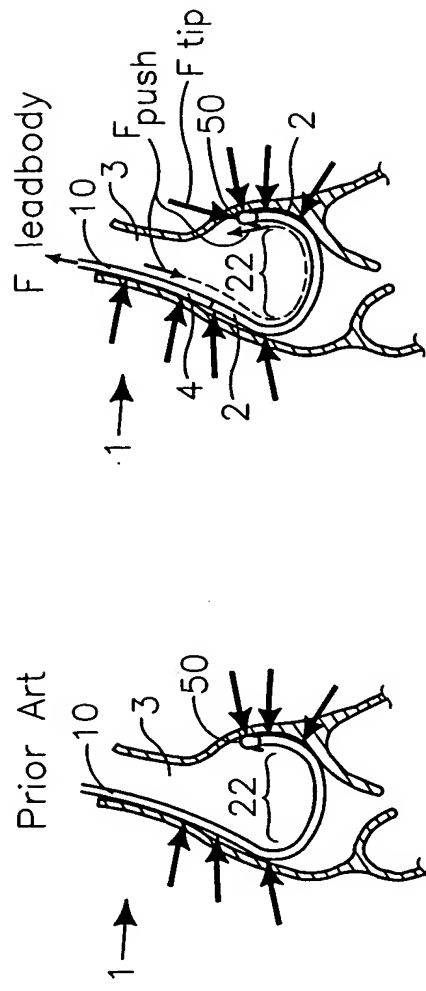
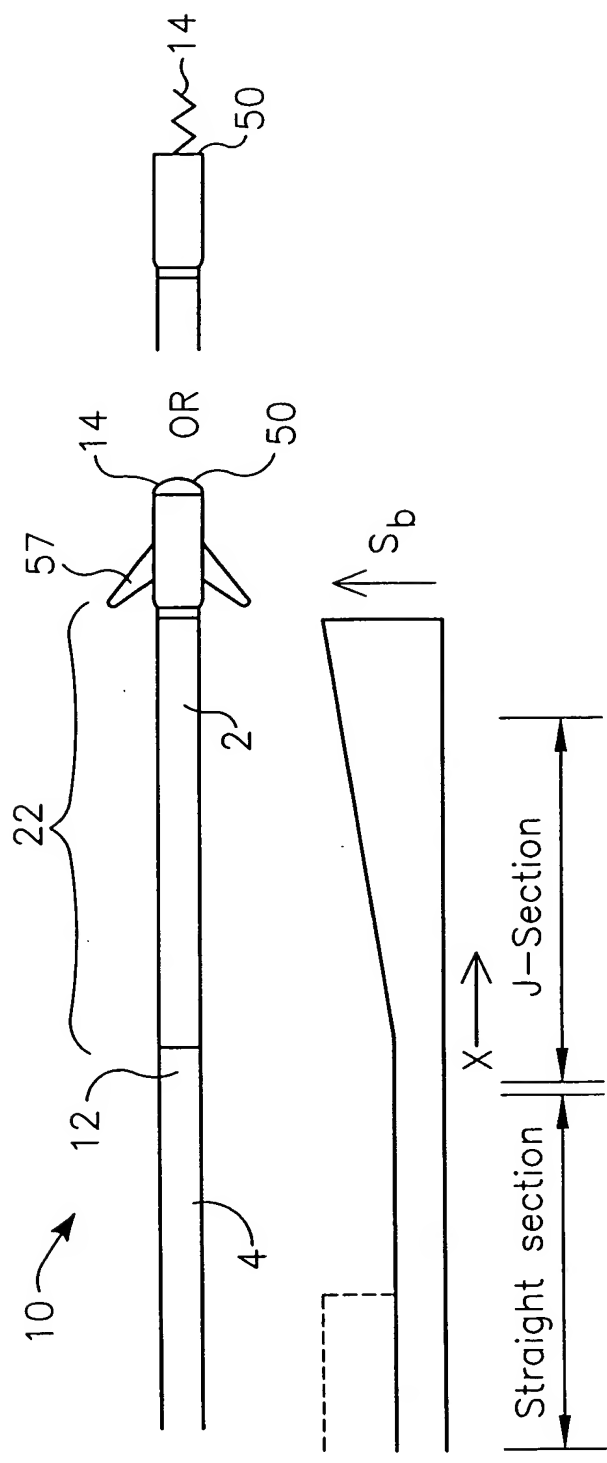
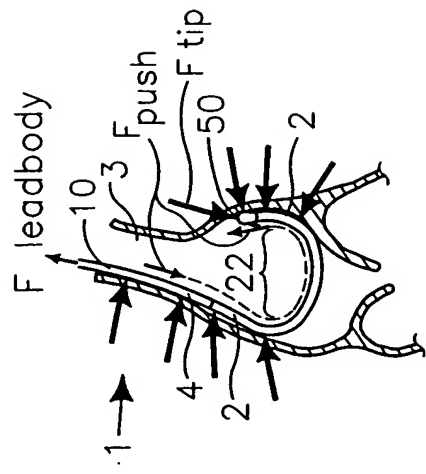


FIG. 2(b)



Conventional Lead

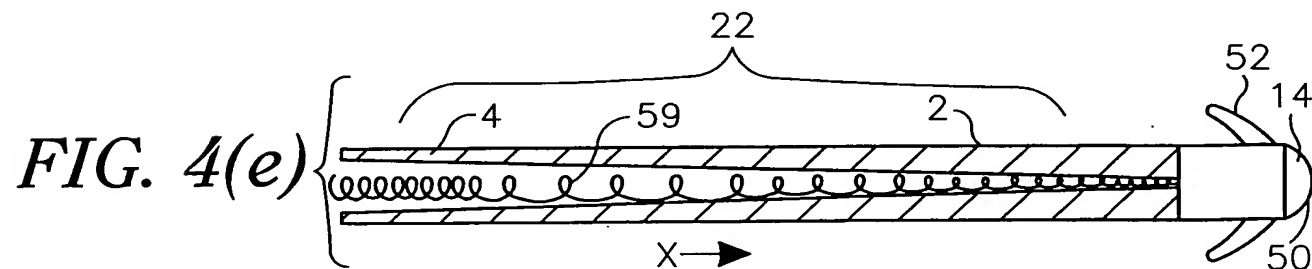
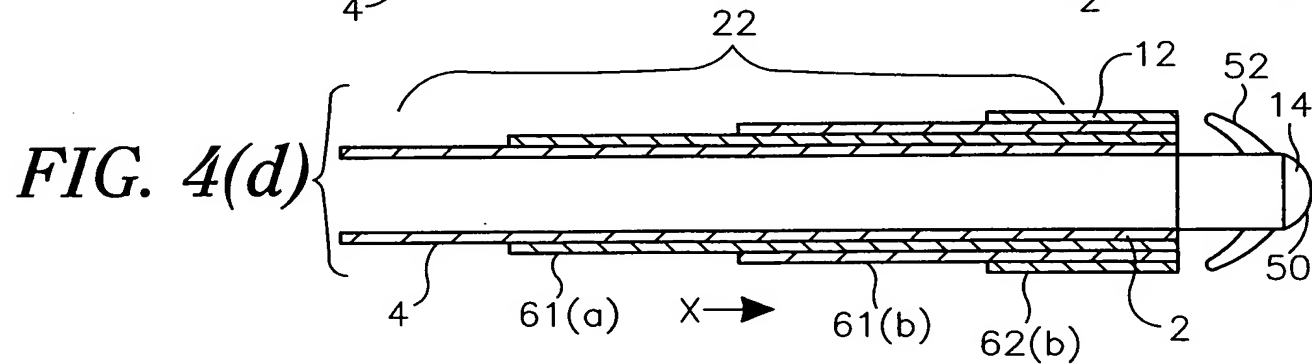
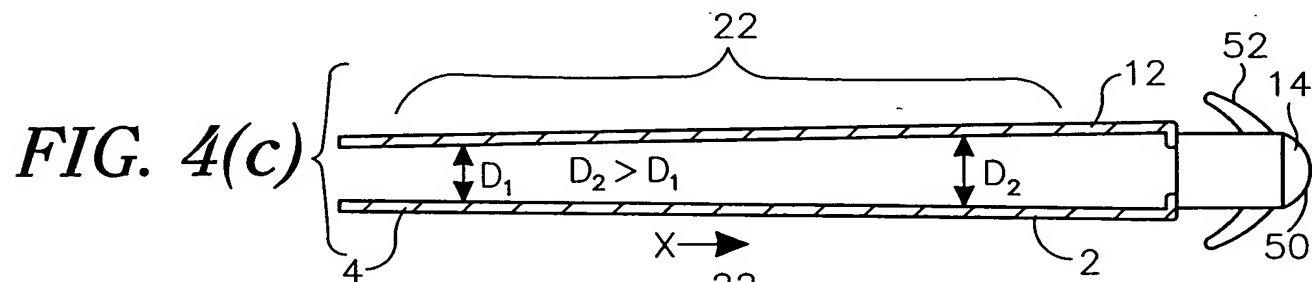
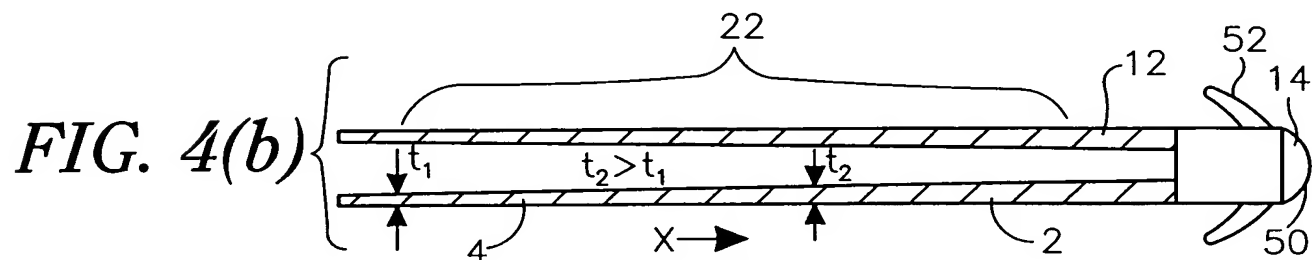
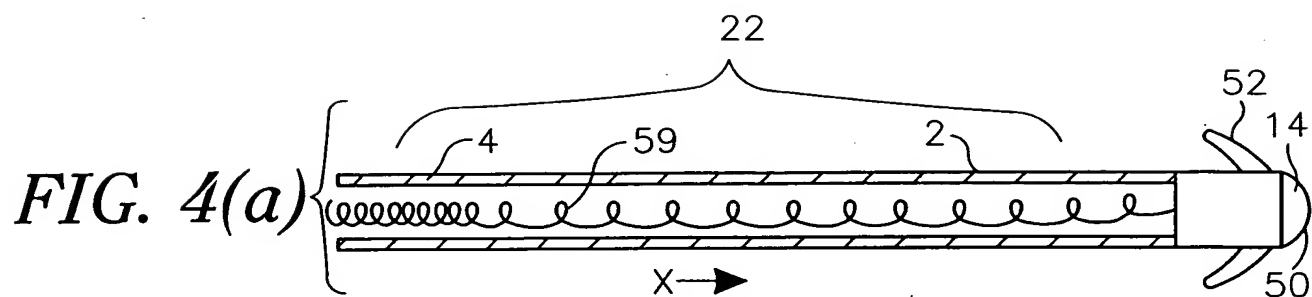
Present Invention



Present Invention

FIG. 3(b)

FIG. 3(c)



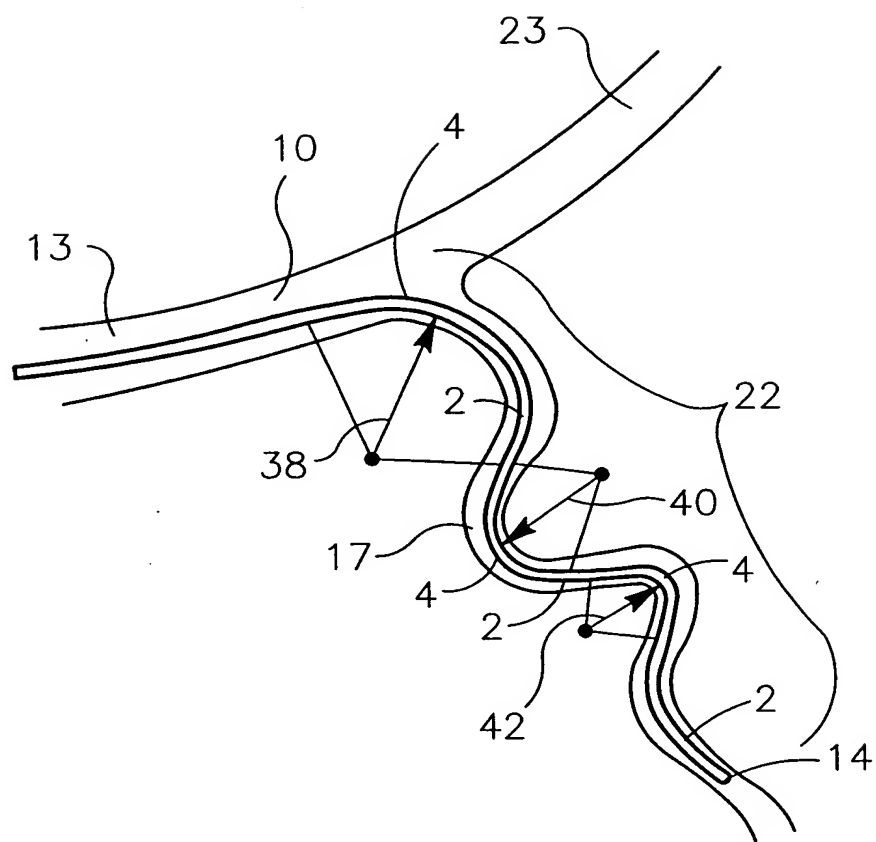


FIG. 5

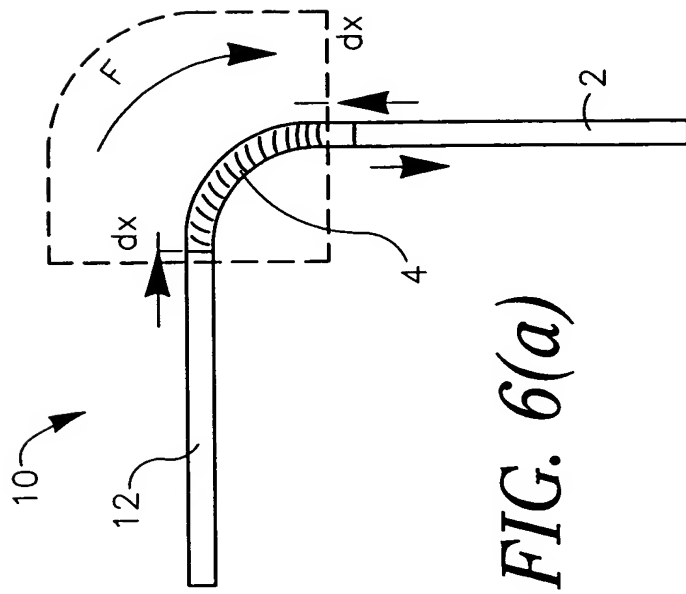


FIG. 6(a)

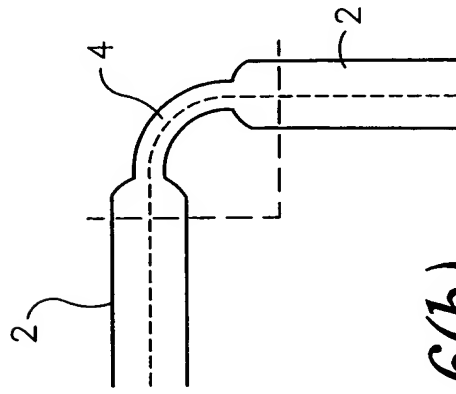


FIG. 6(b)

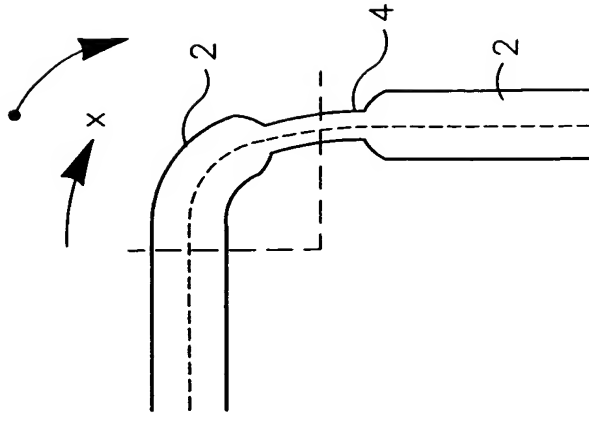


FIG. 6(c)

FIG. 7(a)

FIG. 7(a) illustrates four different cross-sectional shapes of a beam, labeled 4, 12, 2, and 10. The shapes are shown in a sequence from top to bottom. The top shape (4) is a simple rectangle with a positive sign (+) on the left and a negative sign (-) on the right, with an upward arrow labeled S_b . The second shape (12) is a trapezoidal shape with a positive sign (+) on the left and a negative sign (-) on the right, with an upward arrow labeled $\frac{dE}{dx} \times Fax$. The third shape (2) is a simple rectangle with a positive sign (+) on the left and a negative sign (-) on the right, with an upward arrow labeled S_b . The bottom shape (10) is a simple rectangle with a positive sign (+) on the left and a negative sign (-) on the right, with an upward arrow labeled S_b . The shapes are labeled with numbers: 4, 12, 2, 10, 14, and 50. A bracket labeled 12 is under the first two bars, and a bracket labeled 22 is under the last two bars. An arrow labeled X points to the right.

FIG. 7(b)

The diagram illustrates a device structure and its corresponding energy band profile. The structure, shown in cross-section, consists of a substrate 22 with a layer 4 on top. A gate structure 10 is formed on layer 4, with a gate dielectric 12 and a gate electrode 14. A contact 50 is located at the end of the device. The energy band profile is shown above the structure, with the conduction band edge indicated by a solid line and the valence band edge by a dashed line. The energy difference between the bands is labeled $\frac{dE}{dx} \times F_{ax}$. The diagram also shows the electric field S_b and the potential ϕ across the device.

FIG. 7(c)

FIG. 7(c) illustrates three vertically aligned diagrams. The top diagram shows a square wave signal labeled S_b with a vertical axis marked 0, +, and -. The middle diagram shows a sinusoidal wave signal labeled $\frac{dE}{dx} \times F_{ax}$ with a vertical axis marked 0, +, and -. The bottom diagram shows a segmented structure 10 with segments labeled 2, 4, 2, 12, 4, 2, 4, and 2, and a semi-circular end 14. A horizontal axis X with an arrow points to the right. A bracket 22 is at the bottom.

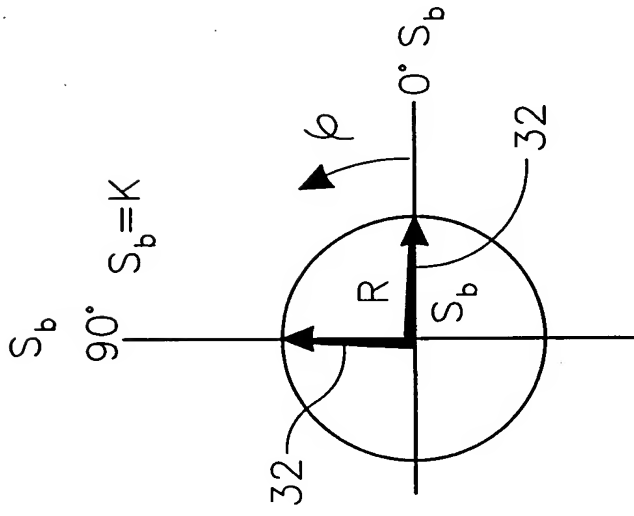


FIG. 8(a)

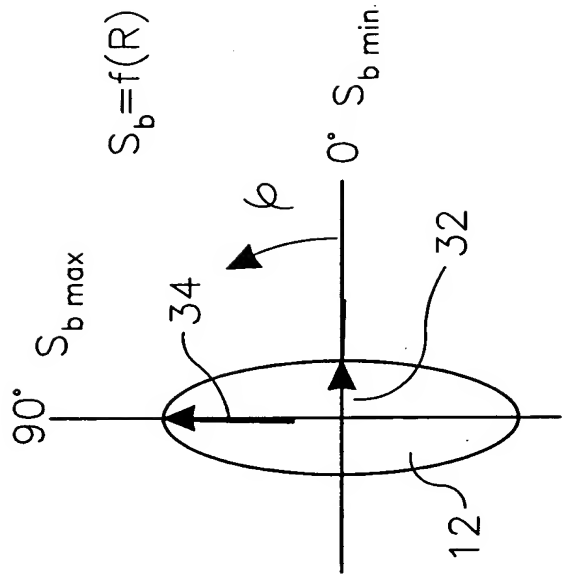


FIG. 8(b)

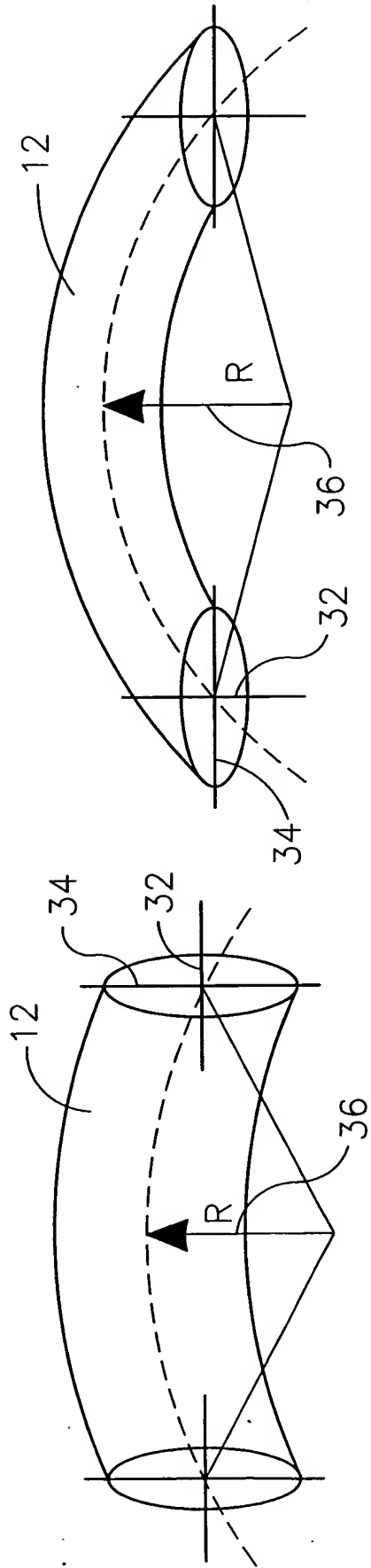


FIG. 9(b)

FIG. 9(a)

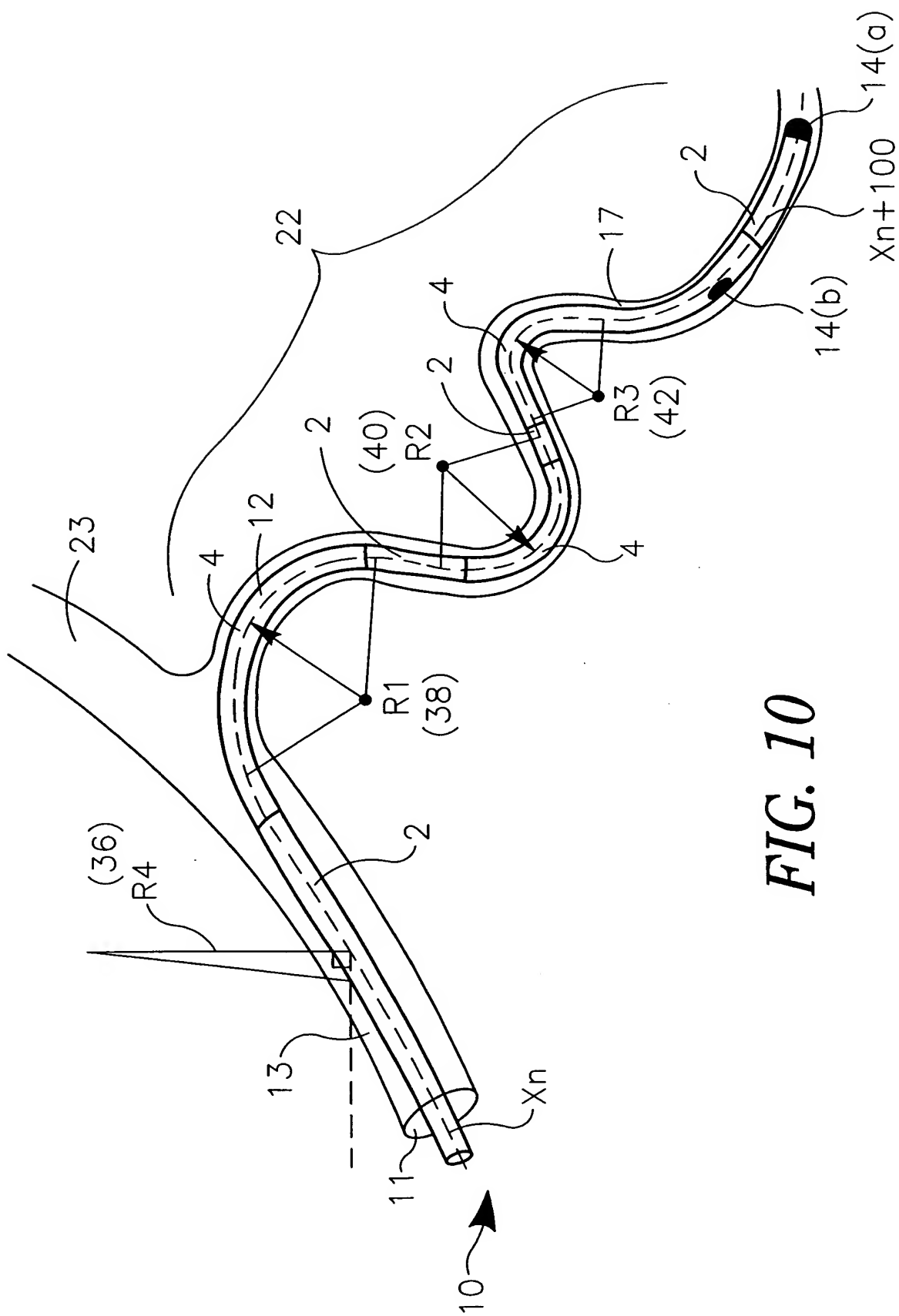


FIG. 10

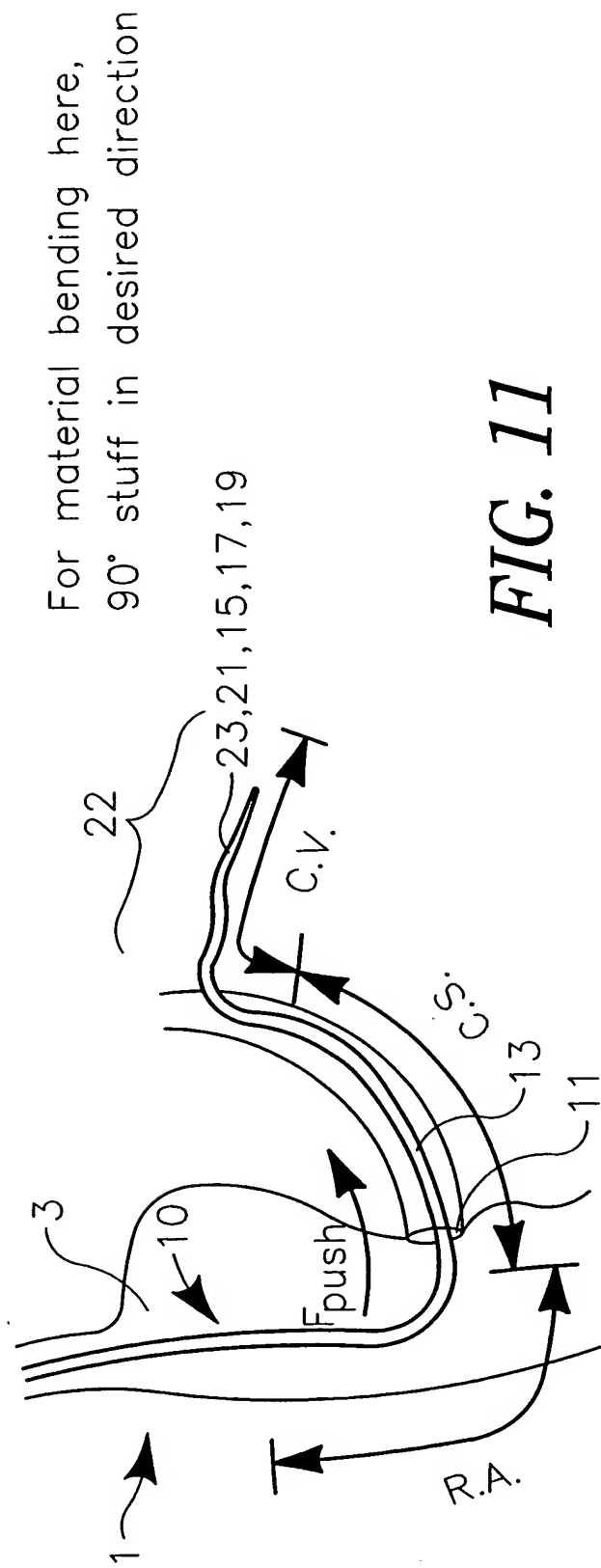
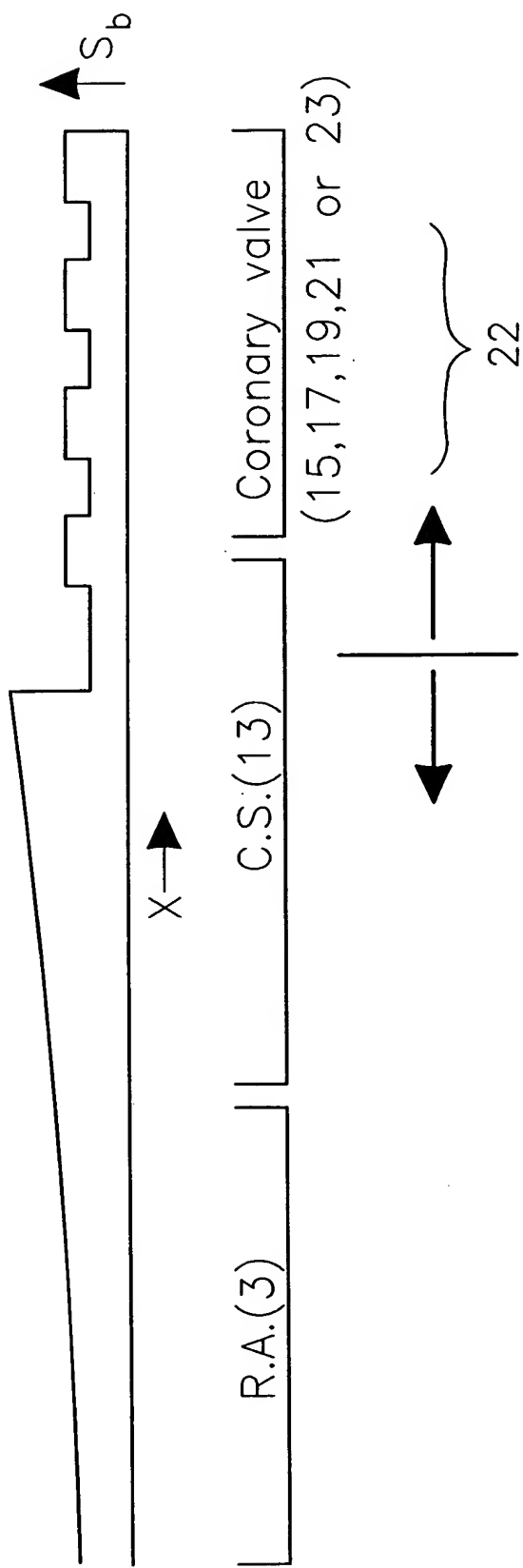


FIG. 11

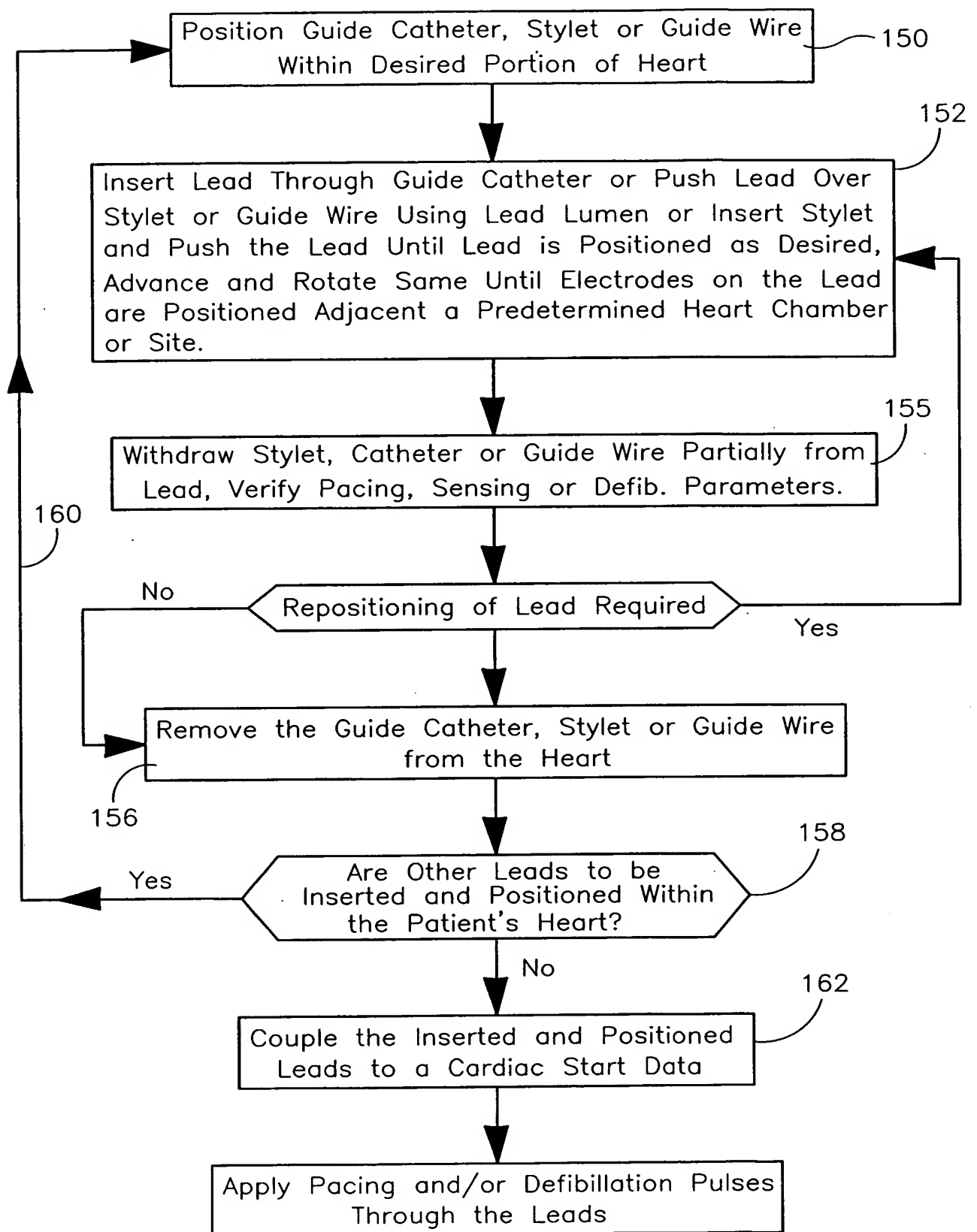


FIG. 12